## CLAIMS

What is claimed is:

1. A system for securing a shaft within a hollow member, the hollow member having an inner tapered surface, the system comprising:

a hollow outer member having an tapered inner surface, a generally cylindrical extension and a concentric lip formed on the extension;

a sleeve having an tapered outer surface configured to interface with the tapered inner surface of the hollow member, an inner surface configured to interface with a shaft, and a threaded extension; and

a locking member having a threaded inner section configured to mate with the threaded extension of the sleeve, and an eccentric aperture forming a varying depth inner groove configured to mate with the concentric lip of the hollow outer member.

2. The system of claim 1, wherein the concentric lip of the hollow outer member is defined by an annular groove formed within the extension.

3. The system of claim 2, wherein the locking member abuts a distal face of the hollow outer member for engagement with the threaded extension of the sleeve for drawing the sleeve into engagement between the hollow outer member and the shaft.

4. The system of claim 3, wherein a lateral wall of the inner groove of the locking member abuts the lip of the hollow outer member to urge the sleeve out of engagement with the hollow outer member and the shaft.

5. The system of claim 1, wherein the hollow outer member comprises an inner ring of a bearing assembly.

6. The system of claim 1, wherein the eccentric aperture of the locking member is of larger diameter than an outer diameter of the lip of the hollow outer member.

7. The system of claim 6, wherein the groove formed by the eccentric aperture of the locking member varies in depth from a maximal depth to substantially flush with the central aperture.

8. The system of claim 1, wherein the locking member is centered with respect to the hollow outer member by threaded engagement with the sleeve.

9. A system for assembly and disassembly of a bearing and shaft, the system comprising:

a shaft;

a bearing assembly configured for mounting about the shaft, the bearing assembly including an inner ring having a tapered inner surface, a cylindrical extension and an annular outer groove forming a lip on the extension;

a sleeve configured for assembly between the shaft and the inner ring, the sleeve having a tapered outer surface to interface with the tapered inner surface of the inner ring, an inner surface to interface with the shaft, and an externally threaded extension; and

a nut having a threaded inner surface for interfacing with the threaded extension of the sleeve, and an eccentric aperture forming an inner groove of varying depth for interfacing with the lip of the inner ring.

10. The system of claim 9, wherein the inner groove of the nut forms a lip of varying depth.

11. The system of claim 10, wherein the lip of the nut and the annular outer groove of the inner ring are dimensioned to permit a distal face of the inner ring to abut the nut during threaded engagement of the sleeve and nut for drawing the sleeve between the inner ring and the shaft.

12. The system of claim 9, wherein a lateral wall of the inner groove of the nut abuts the lip of the inner ring to urge the sleeve out of engagement with the inner ring and the shaft.

13. The system of claim 9, wherein the eccentric aperture of the nut is of larger diameter than an outer diameter of the lip of the inner ring.

14. The system of claim 13, wherein the inner groove of the nut varies in depth from a maximal depth to substantially flush with the central aperture.

15. The system of claim 9, wherein the nut is centered with respect to the inner ring by threaded engagement with the sleeve.

16. A method for assembling a hollow member and a shaft, the hollow member having a tapered inner surface and a cylindrical extension presenting an annular outer groove forming a concentric lip, the method comprising

assembling a tapered sleeve between the hollow member and the shaft, tapered sleeve having a tapered outer surface to interface with the tapered inner surface of the hollow member, an inner surface to interface with the shaft, and an externally threaded extension;

assembling a locking member on the sleeve, the locking member including an inner threaded section to interface with the threaded extension, and an eccentric aperture forming a varying depth groove for receiving the lip of the hollow member; and

tightening the locking member on the sleeve to draw the sleeve into engagement between the hollow member and the shaft.

17. The method of claim 16, wherein the eccentric aperture of the locking is of larger diameter than the lip of the hollow member

18. The method of claim 16, comprising the further step of tightening a set screw in the locking member to prevent loosening of the locking member.

20. The method of claim 16, wherein as the locking member is tightened on the sleeve, the locking member abuts the hollow member.

21. The method of claim 20, wherein a body portion of the locking member abuts the hollow member for tightening of the locking member on the sleeve.

22. A method for disassembling a bearing and shaft, the method comprising:

rotating a locking member on a tapered sleeve positioned between a bearing inner ring and a shaft, the inner ring having a tapered inner surface and a cylindrical extension presenting an annular groove, the tapered sleeve having a tapered outer surface interfacing with the tapered inner surface of the inner ring, and a threaded extension, the locking member having threaded inner section engaging the threaded outer surface of the sleeve, and an eccentric aperture forming a varying depth groove, a side wall of the varying depth groove contacting a side wall of the annular groove of the inner ring to force relative displacement of the inner ring and the tapered sleeve.

23. The method of claim 22, wherein the varying depth groove has a depth varying from a maximal depth to substantially flush with the eccentric aperture.

24. The method of claim 22, further comprising loosening a set screw in the locking member prior to rotating the locking member on the tapered sleeve.